

WHAT IS CLAIMED IS:

1. An automatic urine disposal device for discharging urine collected in a urine receptacle into a urine tank by using a vacuum pump , wherein said urine receptacle comprises:

5 a substantially rectangular, non-breathable outer sheet having side faces extending upwardly or downwardly from two opposed sides of the bottom surface,

a urine absorbent material housed in said outer sheet, and

10 a hard-breathable top sheet disposed on top of the surface of said urine absorbent material;

said urine tank being tightly sealed , a first urine drainage means formed on the bottom surface of said outer sheet, a second urine drainage means connected to said first urine drainage means to direct urine into said urine tank , and said vacuum pump creating a vacuum in said urine tank.

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2. An automatic urine disposal device according to claim 1, wherein said urine receptacle keeps said urine absorbent material highly airtight and said vacuum pump absorbs air from said urine tank.

20 3. An automatic urine disposal device according to claim 1, wherein said outer sheet is liquid-impermeable, a liquid-permeable top sheet adheres to the upper end of the edge portion of said outer sheet to keep said urine absorbent material airtight, said vacuum pump makes pre ssure in said first urine drainage

means negative, and a urine sensor is provided to detect that urine has been absorbed by said urine absorbent material and activate said vacuum pump.

4. An automatic urine disposal device according to claim 1, wherein a hard-breathable top sheet is disposed on top of the surface of said urine absorbent material to keep said urine absorbent material highly airtight, a lid for sealing said urine tank is provided, and a urine sensor is also provided to detect that urine has been absorbed by said urine absorbent material and activate said vacuum pump.

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5. An automatic urine disposal device according to claim 4, wherein layers of urine absorbent material are laminated and housed in said outer sheet so that the water-absorbent capability of the bottom-surface side urine absorbent material may be large.

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6. An automatic urine disposal device according to claim 5, wherein said urine absorbent material has two layers and an accordion-folded balloon stretchable and contractible along the surface of said urine absorbent material by air blast is disposed between said urine absorbent material and said top sheet.

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7. An automatic urine disposal device according to claim 4, wherein said top sheet is disposed such that it can come in contact with a wearer's urinating.

part.

8. An automatic urine disposal device according to claim 1, wherein the cross section of said urine receptacle is of fork ed shape, letter U shape, or
5 letter Ω shape.

9. An automatic urine disposal device according to claim 4, wherein said urine receptacle has a perforated urine drainage tube which abuts on said urine absorbent material and has a large number of urine drainage pores for
10 discharging urine and a support sheet which supports said perforated urine drainage tube, and urine is drained through said perforated urine drainage tube into said urine tank.

10. A urine receptacle used for an automatic urine disposal device to absorb
15 urine discharged from a wearer's urinating part, wherein said urine receptacle comprises:

a substantially rectangular, liquid -impermeable, non-breathable outer sheet having a fork-shaped, letter-U-shaped, or letter- Ω -shaped cross section and having a urine drainage means on the bottom surface thereof,

20 a urine absorbent material housed in said outer sheet, and

a hard-breathable top sheet disposed such that it covers the surface of said urine absorbent material.

11. A urine receptacle according to claim 10, further comprising gathers provided along the periphery of said outer sheet.

12. A urine receptacle according to claim 11, wherein said top sheet is
5 liquid-permeable and said gathers are slanted inwardly along the periphery of said outer sheet.

13. A urine receptacle according to claim 11, wherein an accordion -folded
balloon stretchable and contractible along the surface of said urine absorbent
10 material by air blast is disposed between said urine absorbent material and said top sheet.